

**REMARKS**

The Office Action dated February 22, 2006 has been reviewed and carefully considered. The Examiner's allowance of claims 9, 13-27, 32, 34 and 35 is appreciated. Claims 5, 9, 13-27, 30, 32, 34 and 35 are pending, the independent claims being 5, 9, 13, 14, 18, 21, 23, 26, 30, 32, 34 and 35. Reconsideration of the above-identified application in view of the following remarks is respectfully requested.

Claims 5 and 30 stand rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,115,453 to Calderbank et al. ("Calderbank").

The Calderbank patent is understood by the present applicant to disclose the following:

An encoder for encoding a first bit stream (output from the scrambler 104), comprising:

means (110) for generating a second bit stream (output from the differential encoder 110) from the first bit stream, the second bit stream having one or more different corresponding bit values than the first bit stream;

means (124) for generating ~~a first bit and a second bit~~ 8 bits (i.e.,  $Z_9$ - $Z_{16}$ ) for each subgroup of 5 out of 28 bits (i.e., subgroup containing  $X_8$ - $X_{12}$ , the subgroup being selected from a 28-bit group (col. 3, lines 20-21)) ~~bit~~ in the first bit stream; and

means (122) for generating 8 bits (i.e.,  $Z_1$ - $Z_8$ ) ~~a third bit and a fourth bit~~ for each pair of bits (i.e.,  $Y_2$ ,  $Y_3$ ) ~~bit~~ in the second bit stream., wherein the means for generating a second bit stream comprises at least one of a ones complemeter and a differential encoder.

The language above in underline is not language appearing in the present claim 5, and is provided above merely to emphasize differences between the present claim 5 and Calderbank.

In particular, with reference to the present claim 5, Calderbank is deemed not to disclose or suggest the means for generating the first and second bit, and is deemed not to disclose or suggest the means for generating the third and fourth bit.

For at least the above reasons, the present applicant respectfully submits that Calderbank does not anticipate the present invention as recited in claim 5.

Moreover, the Calderbank region selector 124 selects a region of a constellation in which to insert symbols for transmission. The bit converter 122 selects a partition in which to insert symbols (col. 6, lines 11-19). This protocol differs from that of the present invention as recited in claim 5. The present applicant therefore respectfully submits that it would not have been obvious to modify Calderbank to resemble the instant claim 5.

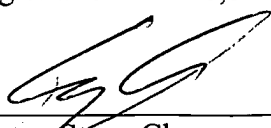
Claim 30 is similar to claim 5, but recites an apparatus that comprises the encoder, and specifies that the generating is encoding. Accordingly, claim 30 is deemed to distinguish patentably over Calderbank for at least the same reasons discussed above in connection with claim 5.

For all the foregoing reasons, it is respectfully submitted that all the present claims are patentable in view of the cited references. A Notice of Allowance is respectfully requested.

Respectfully submitted,

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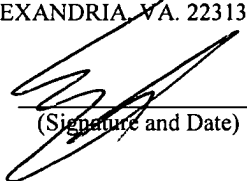
  
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